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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/811,878

03/30/2004

Akihisa Sato

1213.43685X00

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7590

06/14/2007

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EXAMINER

ADAMS, CHARLES D

ART UNIT

PAPER NUMBER

2164

MAIL DATE

DELIVERY MODE

06/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/811,878

Applicant(s)

SATO ET AL.

Examiner

Charles D. Adams

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. In response to communications filed on 23 March 2007, claims 1 and 4-10 are amended and claims 2-3 are cancelled. Claims 1 and 4-10 are pending in the application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 9-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed towards a program, which is simply software. The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive

material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambliss et al. (US Pre-Grant Publication 2004/0003087) in view of Donze et al. (US Pre-Grant Publication 2004/0054782), and further in view of Sekijima et al. (US Patent 6,957,429).

As to claim 1, Chambliss et al. teaches:

An information processing apparatus which is used to operate a plurality of applications to request data input/output to/from a storage (see paragraph [0044]);

Chambliss et al. does not explicitly teach wherein said storage comprises at least one port

Donze et al. teaches explicitly wherein said storage comprises at least one port (see paragraph [0035] and Figure 2)

Chambliss et al. as modified teaches and at least one array group including a plurality of disk units (see Chambliss et al. paragraph [0044] and Donze et al. paragraph [0035] and Figure 1);

Wherein said information processing apparatus accesses, via said at least one port, a virtual area provided by said at least one array group (see Chambliss et al. paragraph [0048] and Donze et al. paragraph [0034] and Figure 2. A virtual area is created by the RAID group);

Wherein said storage and said information processing apparatus constitute an access process section for processing an access request from an application (see Chambliss et al. paragraph [0044]-[0047]);

Wherein said access process section includes at least one port and said at least one array group (see Donze et al. Figure 6 and paragraph [0054]-[0055]);

Wherein said information processing apparatus comprises an access monitoring section which monitors an access request for each of said applications (see Chambliss et al. paragraphs [0046] and [0082]-[0083]); and

Wherein said management host comprises:

An acceptance section which accepts specification of a new application (see Chambliss et al. paragraph [0083]);

A current load calculation section which calculates current amount of data accessed from said application to said storage for each of said applications based on information obtained by said access monitoring section (see Chambliss et al. paragraph [0091] and Donze et al. paragraph [0055])

An estimated load calculation section which calculates each of an estimated amount of data accessed from said application to said storage in said port (see Donze et al. paragraphs [0054] and [0062]) and an estimated amount of data in said array group, in case of addition of said new application based on current amount of data calculated by said current load calculation section and based on information obtained by said access monitoring section (see Chambliss et al. paragraphs [0063]-[0071].

Configuration rates can be set that limit "amounts of data" or rates of data transfer. Also see paragraph [0075] and [0082]-[0083]. "The balance vector value of a service class denotes a level of credit defining how much usage of the associated resource can be performed immediately without causing the usage limit to be exceeded. A request is admitted into servicing by the storage system only when the balance vector values exceed the predicated resource usage of that request, and for each request that is admitted into serving, the balance vector values are reduced by the request's resource usage", paragraph [0082]); and

A load data output section which outputs each of the estimated amount of data in said port (see Donze et al. paragraphs [0055]-[0066])

Chambliss et al. as modified does not explicitly teach and the estimated amount of data in said array group calculated by said estimated load calculation section.

Sekijima et al. teaches and the estimated amount of data in said array group calculated by said estimated load calculation section (see 3:53-59)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Chambliss et al. by the teaching of Donze et al., since Donze et al. teaches that "Further, by stitching and mapping the components of both the application and storage domain, the components may be included in a comprehensive risk analysis, performance evaluation, and modeling and simulation for system upgrading" (see paragraph [0006]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Chambliss et al. by the teaching of Sekijima et al., since Sekijima et al. teaches that "the present invention presents users with a list of applicable services dynamically updated and enables the users to specify selective combinations of the services. Thereby, the present invention provides service users with the easy recognition of applicable services, flexible selection of services to meet users' purposes, and smooth application of selected services to relevant data" (see 2:47-53). In addition to this, it is well known in the art to output data that has been calculated by a method.

As to claim 4, Chambliss et al. as modified teaches:

Wherein each of said port and said array group includes a plurality of configurations having similar functions (see Donze et al. Figures 1 and 6 and Chambliss et al. paragraphs [0076]-[0077]);

Wherein said configurations for said at least one port and said at least one array group comprise a configuration information storage section which stores information about available combinations capable of processing said access request (see Chambliss et al. paragraphs [0063]-[0071], [0073]-[0075], and [0107]-[0109]); and

Wherein said estimated load calculation section calculates estimated amount of data with respect to said available combinations of said configurations for said at least one port and said at least one array group (see Chambliss et al. paragraph [0082]-[0083]).

As to claim 5, Chambliss et al. teaches:

A storage which stores a database (see paragraph [0044] and [0058]-[0060]. There is information stored by address, therefore, the storage is a database)

Chambliss et al. does not explicitly teach and comprises at least one port
Donze et al. teaches and comprises at least one port (see paragraph [0035] and Figure 2);

Chambliss et al. as modified teaches and at least one array group including a plurality of disk units (see Chambliss et al. paragraph [0044] and Donze et al. paragraph [0035] and Figure 1);

A plurality of information processing apparatuses which are used to operate an application requesting data input/output to/from said storage and access, via said at least one port, a virtual area provided by said at least one array group (see paragraph [0044] and Figure 2. Also see Donze et al. Figure 1 and paragraph [0026]); and

A management host which manages said storage (see Chambliss et al. paragraphs [0063]-[0071], [0075], and [0082]-[0083]),

Wherein each of said information processing apparatuses comprises:

A database management system which processes an access request from said application to said database and includes said at least one port and said at least one array group (see Chambliss et al. paragraph [0044]-[0047] and Donze et al. Figure 6 and paragraphs [0054]-[0055]);

An access monitoring section which monitors an access request sent from said application to said database management system and obtains information about said access request (see Chambliss et al. paragraphs [0046] and [0082]-[0083]); and

An access information output section which collects information about said access request and adds up said information correspondingly to said application (see Chambliss et al. paragraph [0044]-[0046] and [0083]), and

Wherein said management host comprises:

An acceptance section which accepts specification of a new application (see Chambliss et al. paragraph [0083]);

A current load calculation section which calculates current amount of data accessed from said application to said storage for each of said applications based on information obtained by said access monitoring section (see Chambliss et al. paragraph [0091] and Donze et al. paragraph [0055]);

An estimated load calculation section which calculates each of an estimated amount of data accessed from said application to said storage in said port (see Donze

et al. paragraphs [0054] and [0062]) and an estimated amount of data in said array group, calculated by said current load calculation section and based on information obtained by said access monitoring section (see Chambliss et al. paragraphs [0063]-[0071]. Also see paragraph [0075] and [0082]-[0083]);

A load data output section which outputs each of the estimated amount of data in said port (see Donze et al. paragraphs [0055]-[0066])

Chambliss et al. does not explicitly teach and the estimated amount of data in said array group calculated by said estimated load calculation section;

Sekijima et al. teaches and the estimated amount of data in said array group calculated by said estimated load calculation section (see 3:53-59); and

Chambliss et al. as modified teaches a configuration setup section which sets up a change in configuration of said storage based on the estimated amount of data calculated by said estimated load calculation section (see Chambliss et al. paragraphs [0082]-[0083]. The amount of available storage will be changed upon the addition of a new program based on the estimated cost of that program).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Chambliss et al. by the teaching of Donze et al., since Donze et al. teaches that "Further, by stitching and mapping the components of both the application and storage domain, the components may be included in a comprehensive risk analysis, performance evaluation, and modeling and simulation for system upgrading" (see paragraph [0006]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Chambliss et al. by the teaching of Sekijima et al., since Sekijima et al. teaches that "the present invention presents users with a list of applicable services dynamically updated and enables the users to specify selective combinations of the services. Thereby, the present invention provides service users with the easy recognition of applicable services, flexible selection of services to meet users' purposes, and smooth application of selected services to relevant data" (see 2:47-53). In addition to this, it is well known in the art to output data that has been calculated by a method.

As to claim 6, Chambliss et al. teaches:

A storage which stores a file (see paragraph [0044] and [0058]-[0060])

Chambliss et al. does not explicitly teach and comprises at least one port

Donze et al. teaches and comprises at least one port (see paragraph [0035] and Figure 2)

Chambliss et al. as modified teaches and at least one array group including a plurality of disk units (see Chambliss et al. paragraph [0044] and Donze et al. paragraph [0035] and Figure 1);

A plurality of information processing apparatuses which are used to operate an application requesting input/output of data stored in a file to/from said storage and access, via said at least one port, a virtual area provided by said at least one array

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group (see paragraph [0044] and Figure 2. Also see Donze et al. Figure 1 and paragraph [0026]); and

A management host which manages said storage (see Chambliss et al. paragraphs [0063]-[0071], [0075], and [0082]-[0083]),

Wherein each of said information processing apparatuses comprises:

A file system which processes an access request from said application to said file and includes said at least one port and said at least one array group (see Chambliss et al. paragraph [0044]-[0047] and Donze et al. Figure 6 and paragraphs [0054]-[0055]);

An access monitoring section which monitors an access request sent from said file system to said storage and obtains information about said access request (see Chambliss et al. paragraphs [0046] and [0082]-[0083]); and

An access information output section which collects information about said access request and adds up said information correspondingly to said application (see Chambliss et al. paragraph [0044]-[0046] and [0083]),

wherein said management host comprises:

an acceptance section which accepts specification of a new application (see Chambliss et al. paragraph [0083]);

a current load calculation section which calculates current amount of data for each of said applications based on information obtained by said access monitoring section (see Chambliss et al. paragraph [0091] and Donze et al. paragraph [0055]);

an estimated load calculation section which calculates each of an estimated amount of data accessed from said application to said storage in said port (see Donze

et al. paragraphs [0054] and [0062]) and an estimated amount of data in said array group, in case of addition of said new application based on current amount of data calculated by said current load calculation section and based on information obtained by said access monitoring section (see Chambliss et al. paragraphs [0063]-[0071]. Also see paragraph [0075] and [0082]-[0083]);

a load data output section which outputs the estimated amount of data in said port (see Donze et al. paragraphs [0055]-[0066])

Chambliss et al. does not explicitly teach and the estimated amount of data in said array group calculated by said estimated load calculation section; and

Sekijima et al. teaches and the estimated amount of data in said array group calculated by said estimated load calculation section (see 3:53-59); and

Chambliss et al. as modified teaches a configuration setup section which sets up a change in configuration of said storage based on estimated amount of data calculated by said estimated load calculation section (see Chambliss et al. paragraphs [0082]-[0083]. The amount of available storage will be changed upon the addition of a new program based on the estimated cost of that program).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Chambliss et al. by the teaching of Donze et al., since Donze et al. teaches that "Further, by stitching and mapping the components of both the application and storage domain, the components may be included in a comprehensive risk analysis, performance evaluation, and modeling and simulation for system upgrading" (see paragraph [0006]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Chambliss et al. by the teaching of Sekijima et al., since Sekijima et al. teaches that "the present invention presents users with a list of applicable services dynamically updated and enables the users to specify selective combinations of the services. Thereby, the present invention provides service users with the easy recognition of applicable services, flexible selection of services to meet users' purposes, and smooth application of selected services to relevant data" (see 2:47-53). In addition to this, it is well known in the art to output data that has been calculated by a method.

As to claim 7, Chambliss et al. teaches a control method of an information processing system, the system comprising an information processing apparatus which is used to operate a plurality of applications to request data input/output to/from a storage and a management host which manages said storage (see paragraph [0044]),

Chambliss et al. does not explicitly teach wherein said storage comprises at least one port;

Donze et al. teaches wherein said storage comprises at least one port (see paragraph [0035] and Figure 2)

Chambliss et al. as modified teaches and at least one array group including a plurality of disk units (see Chambliss et al. paragraph [0044] and Donze et al. paragraph [0035] and Figure 1),

Wherein said information processing apparatus accesses, via said at least one port, a virtual area provided by said at least one array group(see Chambliss et al. paragraph [0048] and Donze et al. paragraph [0034] and Figure 2. A virtual area is created by the RAID group),

Said method comprises the steps of:

Monitoring an access request from each of said applications (see Chambliss et al. paragraphs [0046] and [0082]-[0083]);

Obtaining information about said access request for each of said applications (see Chambliss et al. paragraphs [0046] and [0082]-[0083]);

Calculating current amount of data accessed from each of said applications to said storage for each of said applications, in case of addition of said new application based on information about said obtained access request (see Chambliss et al. paragraph [0091] and Donze et al. paragraph [0055])

Accepting specification of a new application (see Chambliss et al. paragraph [0083]);

Calculating estimated amount of data accessed from each of said applications to said storage for each said applications, in case of addition of said new application based on information about said obtained access request (see Chambliss et al. paragraphs [0082]-[0083]);

Calculating each of an estimated amount of data in said port (see Donze et al. paragraphs [0054] and [0062]) and an estimated amount of data in said array group in case of addition of said new application based on said calculated current data and

information about said obtained access request (see Chambliss et al. teaches paragraphs [0063]-[0071]. Also see paragraph [0075] and [0082]-[0083]); and

Outputting said calculated each of the estimated amount of data in said port (see Donze et al. paragraphs [0055]-[0066]) and

Chambliss et al. as modified does not teach and the estimated amount of data in array group.

Sekijima et al. teaches and the estimated amount of data in array group (see 3:53-59)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Chambliss et al. by the teaching of Donze et al., since Donze et al. teaches that "Further, by stitching and mapping the components of both the application and storage domain, the components may be included in a comprehensive risk analysis, performance evaluation, and modeling and simulation for system upgrading" (see paragraph [0006]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Chambliss et al. by the teaching of Sekijima et al., since Sekijima et al. teaches that "the present invention presents users with a list of applicable services dynamically updated and enables the users to specify selective combinations of the services. Thereby, the present invention provides service users with the easy recognition of applicable services, flexible selection of services to meet users' purposes, and smooth application of selected services to

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relevant data" (see 2:47-53). In addition to this, it is well known in the art to output data that has been calculated by a method.

As to claim 8, Chambliss et al. as modified teaches wherein said estimated amount of data is calculated in case of addition of a new application for each of said at least one port and said at least one array group to process in series and said access request and for available combinations of configurations of said at least one port and said at least one array group (see Chambliss et al. paragraphs [0044]-[0046]. The access process section can include the storage drives, and the gateways. Also see paragraphs [0088] and [0089]. Requests can be added to a delay queue, and processed 'in series' that way).

As to claim 9, Chambliss et al. teaches a program for calculating load data in an information processing system, the system comprising an information processing apparatus which is used to operate a plurality of applications to request data input/output to/from a storage and a management host which manages said storage (see paragraph [0044]-[0046] and [0083]),

Chambliss et al. does not explicitly teach wherein said storage comprises at least one port

Donze et al. teaches wherein said storage comprises at least one port (see paragraph [0035] and Figure 2)

Chambliss et al. as modified teaches and at least one array group including a plurality of disk units (see Chambliss et al. paragraph [0044] and Donze et al. paragraph [0035] and Figure 1),

Wherein said information processing apparatus accesses, via said at least one port, a virtual area provided by said at least one array group (see Chambliss et al. paragraph [0048] and Donze et al. paragraph [0034] and Figure 2. A virtual area is created by the RAID group),

Wherein said program is tangibly embodied on a machine-readable storage device (see Chambliss et al. paragraph [0044]-[0046] and [0083]), the program comprising:

Means for monitoring an access request from said application and obtaining information about said access request for each of said applications (see Chambliss et al. paragraphs [0046] and [0082]-[0083]);

Means for calculating current amount of data accessed from said application to said storage for each of said applications based on information about said obtained access request (see Chambliss et al. paragraph [0091] and Donze et al. paragraph [0055]);

Means for accepting specification of a new application (see Chambliss et al. paragraph [0083]);

Means for calculating an estimated amount of data accessed from said application to said storage for each of said applications, in case of addition of said new

application based on information about said obtained access request (see Chambliss et al. paragraphs [0082]-[0083]);

Means for calculating each of an estimated amount of data in said port (see Donze et al. paragraphs [0054] and [0062]) and an estimated amount of data in said array group in case of addition of said new application based on said calculated current amount of data and information about said obtained access request (see Chambliss et al. teaches paragraphs [0063]-[0071]. Also see paragraph [0075] and [0082]-[0083]); and

Means for outputting said calculated estimated amount of data in said port (see Donze et al. paragraphs [0055]-[0066]) and

Chambliss et al. does not teach and said estimated amount of data in said array group.

Sekijima et al. teaches and said estimated amount of data in said array group (see 3:53-59)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Chambliss et al. by the teaching of Donze et al., since Donze et al. teaches that "Further, by stitching and mapping the components of both the application and storage domain, the components may be included in a comprehensive risk analysis, performance evaluation, and modeling and simulation for system upgrading" (see paragraph [0006]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Chambliss et al. by the teaching

of Sekijima et al., since Sekijima et al. teaches that “the present invention presents users with a list of applicable services dynamically updated and enables the users to specify selective combinations of the services. Thereby, the present invention provides service users with the easy recognition of applicable services, flexible selection of services to meet users’ purposes, and smooth application of selected services to relevant data” (see 2:47-53). In addition to this, it is well known in the art to output data that has been calculated by a method..

As to claim 10, Chambliss et al. as modified teaches wherein said means for calculating estimated amount of data calculates the estimated amount of data in case of addition of a new application for each of said at least one port and said at least one array group to process in series said access request and for available combinations of configurations of said at least one port and said at least one array group (see Chambliss et al. paragraphs [0044]-[0046]. The access process section can include the storage drives, and the gateways. Also see paragraphs [0088] and [0089]. Requests can be added to a delay queue, and processed ‘in series’ that way).

Response to Arguments

6. Applicant’s arguments filed 23 March 2007 have been fully considered but they are not persuasive.

Applicant argues that the calculation of the current resource usage of Chambliss et al. is not the same as the calculation of the current amount of data for each

application. In response to this argument, Examiner notes in paragraph [0091] that Chambliss et al. teaches determining the actual resource usage required by each service upon the completion of a request. This determination is used to change the estimated resource usage. The resource usage determine is based on the amount of data used (see paragraphs [0063]-[0071]).

Applicant also argues that Chambliss et al. does not teach calculating estimated amount of data accessed from each of said applications to said storage in case of addition of said new application. In response to this argument, Examiner notes that Chambliss et al. teaches in paragraphs [0082] and [0083] to only allows requests when the predicated usage of the request would not exceed a limit.

A new reference, Donze et al. is used to teach calculating an estimated amount of data for a port.

Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Adams whose telephone number is (571) 272-3938. The examiner can normally be reached on 8:30 AM - 5:00 PM, M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charles Adams
AU2164


primary Examiner
Cam y Trung